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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,082	09/29/2003	Jayesh R. Bhakta	NETL.001DV2	2166
20995	7590	02/10/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			PHAM, LY D	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			2827	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/674,082	BHAKTA ET AL.	
	Examiner	Art Unit	
	Ly D. Pham	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>110104</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Response filed November 01, 2004 has been entered.
2. Applicant's Information Disclosure Statements filed November 01, 2004 has been considered by the examiner.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. **Claims 1 and 10 – 14** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 9 – 11, 13, 19, and 20 of copending Application No. 10/765,488. Although the conflicting claims are not identical, they are not patentably distinct from each other because each and every limitation in claims 1 and 10 – 14 of the current application has been previously claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, and 12 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (US Pat Pub 2003/0075789 A1).

Regarding **claims 1, 12 – 14**, Kawamura et al. disclose a memory module comprising:

a printed circuit board (figs. 6 or 7 show memory modules with PCBs);

a plurality of identical integrated circuits mounted in at least two rows onto at least one surface of the PCB (figs. 6 or 7, two rows of identical memory ICs mounted thereon. Paragraph 0060);

a first register and a second register connected to control logic bus which is connected to the plurality of identical ICs (paragraphs 0031 and 0061, shown in figs. 6 or 7 are address registers which are mounted next to and parallel to the data terminals end).

Kawamura et al. teach the first and the second register addressing the memory chips of the first row and the second row, except wherein the first register addressing

the identical integrated circuits located in a first row and a second row of identical integrated circuits on a first lateral half of the at least one surface of the PCB, and the second register addressing the identical integrated circuits located in the first row and the second row of identical integrated circuits on a second lateral half of the at least one surface of the PCB; however, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at these specific features, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Applicants please also note that if the disclosed parts rearrangement achieved a particular operational condition, it has also been held that where the general conditions of a claim are disclosed in the prior arts, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

6. Claims 6 – 9 and 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (US Pat Pub 2003/0075789 A1) in view of Yamasaki et al. (US Pat 6,594,167 B1).

Regarding **claims 6 – 9 and 15 – 18**, Kawamura et al. disclose a memory module of claims 1 and 12, except wherein the identical memory ICs on the first row is 180 degrees in orientation with the identical memory ICs on the second row. However, this feature has been taught by Yamasaki et al. (fig. 19)

Therefore, it is considered obvious to one of ordinary skill in the art, at the time the invention was made, to include the feature shown by Yamasaki to the disclosure by

Kawamura et al. so that each memory chip data I/O pin is nearest to center line to achieve equidistance (col. 11, line 43 – col. 12, line 2).

7. Claims 2 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (US Pat Pub 2003/0075789 A1) in view of Li et al. (US Pat 6,705,877 B1).

Regarding **claims 2, 4, and 5**, Kawamura et al. disclose the memory module of claim 1, except the limitations further disclosed in these claims. However, Li et al. have taught the plurality of identical ICs comprises DDR SDRAM (abstract), and of types 256-Megabit or 512-Megabit (col. 6, lines 26 – 36). Therefore, it is considered obvious to one of ordinary skill in the art, at the time the invention was made, to combine the features to the disclosure taught by Kawamura et al. so that upgrading different memory capacity and configuration can be achieved (col. 3, lines 1 – 3).

As per **claim 3**, although Kawamura et al. and Li et al. did not clearly describe the limitations, in which the memory modules have an approximate dimension of 5.25 inches wide by 2.05 inches high; however, it has been held that modification involving a mere change in the size of a component is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2827

8. When responding to the office action, Applicant(s) are advised to provide the examiner with the page and line numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.
9. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D. Pham whose telephone number is 571-272-1793. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly Pham 
February 5, 2005


HOAI HO
PRIMARY EXAMINER